# RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	09/895,435B
Source:	1FW/6,
Date Processed by STIC:	12/29/04

# ENTERED



#### IFW16

RAW SEQUENCE LISTING DATE: 12/29/2004
PATENT APPLICATION: US/09/895,435B TIME: 14:51:43

Input Set : A:\29248-17 seq list.ST25.txt
Output Set: N:\CRF4\12292004\1895435B.raw

	<110> APPLICANT: DE CLERCQ, BRANTS & PARTNERS c.v.	
4	STEWART, A. Francis	
5	ZHANG, Youming	
6	HALLET, Bernard	
	<120> TITLE OF INVENTION: TYROSINE RECOMBINASE FOR GENETIC ENGINEERING	
	<130> FILE REFERENCE: 29248/17	
	<140> CURRENT APPLICATION NUMBER: US 09/895,435B	
	<141> CURRENT FILING DATE: 2001-06-30	
	<160> NUMBER OF SEQ ID NOS: 10	
	<170> SOFTWARE: PatentIn version 3.2	
	<210> SEQ ID NO: 1 <211> LENGTH: 244	
	<211> DENGIR: 244 <212> TYPE: DNA	
	<213> ORGANISM: Bacillus thuringiensis <400> SEQUENCE: 1	
	<del></del>	0
	aatatatcat tatteettga cacatacatg ttetttttt atacaaaaaa taatacaaca 12	-
	caatattaat tgtgttgtat taggtgttat aataaata	
	cacaatttat cgataaataa atacttttag acgcaacaca atttatagac gcggaggaaa 24	
	tcac 24	
	<210> SEQ ID NO: 2	-
	<211> LENGTH: 118	
	<212> TYPE: DNA	
	<213> ORGANISM: Bacillus thuringiensis	
	<400> SEQUENCE: 2	
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	tttaacqcaa cacaatttat cqataaataa atacttttaq acqcaacaca atttataq 11	8
47	<210> SEQ ID NO: 3	
48	<211> LENGTH: 32	
49	<212> TYPE: DNA	
50	<213> ORGANISM: Bacillus thuringiensis	
52	<400> SEQUENCE: 3	
53	taatacaaca caatattaat tgtgttgtat ta 3	2
56	<210> SEQ ID NO: 4	
57	<211> LENGTH: 249	
58	<212> TYPE: DNA	
59	<213> ORGANISM: Bacillus thuringiensis	
	<400> SEQUENCE: 4	
62	ggggtaccgc cagcatttcg gaaaaaaacc acgctaagaa aatcagagtt aaaaaatcag 6	
	aaaatatatc attattccaa gacacataca gtgtcttttt ttatacaaaa aataatacaa 12	
	cacaatatta attgtgttgt attaggtgtt ataataaata	
	aacacaattt atcgataaat aaatactttt agacgcaaca caatttatag acgcggagga 24	
70	aatcacatg 24	9

### RAW SEQUENCE LISTING DATE: 12/29/2004 PATENT APPLICATION: US/09/895,435B TIME: 14:51:43

Input Set: A:\29248-17 seq list.ST25.txt
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73 <210> SEO ID NO: 5
74 <211> LENGTH: 798
75 <212> TYPE: DNA
76 <213> ORGANISM: Bacillus thuringiensis
78 <400> SEQUENCE: 5
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79 atggatgttg caaaacagtt ttcttcttat cttaaacaag agaataaaac cgagaacact
81 qttcaqqqat acacatcaqq tattaqacag tacataaaat ggtttgaagg ttcctatgac
                                                                         120
83 agaaaattga caaaattgta ccgacaaaat atcttagagt acattagtta tttaaagaat
                                                                         180
85 gtcaaaatgt tgaacgccaa gtccattaac cacaagatta gtagccttgc taaatttaat
                                                                         240
87 gaatttctaa tacagaaagg aagtcaacaa gatcaagtaa ttttattaga tgtaaaaaaag
                                                                         300
89 tttttacaaa gtgtgttaga ggataataac aaacgtaatt atgcaattgc cactctccta
                                                                         360
91 qcatatacag gagtacgtat ttcagaggca ttatctatca aaatgaatga cttcaattta
                                                                         420
93 caqactqqqq aatqtattat tcqaaqtqqa aaaqgaqqta aacaacqaat tgtattacta
                                                                         480
95 aataqtaaqq tacttaqtqc tatcaaaqat tatctcatcq atcgaaaaac atacagtaca
                                                                         540
97 gcacatgaat ctccgtatct ttttattagt aaaaagcgag aaaagctcga ccgtacggtc
                                                                         600
99 gtcaatcgta tctttaaatc atacaggaat gttattactc cacaccaatt acgacacttc
                                                                         660
101 ttctqtacqa atqcaattca aaaaqqattt aqcattcatq aaqttgcaaa tcaagctggg
                                                                          720
103 cactctaaca tccatacgac actactttac acaaatccaa accaactgca gctaaaaaat
                                                                          780
105 aaaatggagc tcttataa
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108 <210> SEQ ID NO: 6
109 <211> LENGTH: 265
110 <212> TYPE: PRT
111 <213> ORGANISM: Bacillus thuringiensis
113 <400> SEQUENCE: 6
115 Met Asp Val Ala Lys Gln Phe Ser Ser Tyr Leu Lys Gln Glu Asn Lys
116 1
                                        10
                    5
119 Thr Glu Asn Thr Val Gln Gly Tyr Thr Ser Gly Ile Arg Gln Tyr Ile
                                    25
                                                         30
123 Lys Trp Phe Glu Gly Ser Tyr Asp Arg Lys Leu Thr Lys Leu Tyr Arg
            35
                                40
127 Gln Asn Ile Leu Glu Tyr Ile Ser Tyr Leu Lys Asn Val Lys Met Leu
128
131 Asn Ala Lys Ser Ile Asn His Lys Ile Ser Ser Leu Ala Lys Phe Asn
132 65
                        70
                                             75
135 Glu Phe Leu Ile Gln Lys Gly Ser Gln Gln Asp Gln Val Ile Leu Leu
136
                                        90
139 Asp Val Lys Lys Phe Leu Gln Ser Val Leu Glu Asp Asn Asn Lys Arg
                100
                                    105
143 Asn Tyr Ala Ile Ala Thr Leu Leu Ala Tyr Thr Gly Val Arg Ile Ser
           115
                                120
147 Glu Ala Leu Ser Ile Lys Met Asn Asp Phe Asn Leu Gln Thr Gly Glu
                            135
                                                 140
151 Cys Ile Ile Arg Ser Gly Lys Gly Gly Lys Gln Arg Ile Val Leu Leu
                        150
                                            155
155 Asn Ser Lys Val Leu Ser Ala Ile Lys Asp Tyr Leu Ile Asp Arg Lys
156
                                        170
159 Thr Tyr Ser Thr Ala His Glu Ser Pro Tyr Leu Phe Ile Ser Lys Lys
                180
                                    185
163 Arg Glu Lys Leu Asp Arg Thr Val Val Asn Arg Ile Phe Lys Ser Tyr
```

## RAW SEQUENCE LISTING DATE: 12/29/2004 PATENT APPLICATION: US/09/895,435B TIME: 14:51:43

Input Set : A:\29248-17 seq list.ST25.txt
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```
164
               195
    167 Arg Asn Val Ile Thr Pro His Gln Leu Arg His Phe Phe Cys Thr Asn
           210
                             215
    171 Ala Ile Gln Lys Gly Phe Ser Ile His Glu Val Ala Asn Gln Ala Gly
    172 225
                         230
                                           235
    175 His Ser Asn Ile His Thr Thr Leu Leu Tyr Thr Asn Pro Asn Gln Leu
                      245
                                        250
    179 Gln Leu Lys Asn Lys Met Glu Leu Leu
    180
                  260
                                    265
    183 <210> SEQ ID NO: 7
    184 <211> LENGTH: 116
    185 <212> TYPE: DNA
    186 <213> ORGANISM: Bacillus thuringiensis
    188 <400> SEQUENCE: 7
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    191 tttaacqcaa cacaatttat cgataaataa atacttttag acqcaacaca atttat
                                                                     116
    194 <210> SEO ID NO: 8
    195 <211> LENGTH: 116
    196 <212> TYPE: DNA
    197 <213> ORGANISM: Bacillus thuringiensis
    199 <400> SEQUENCE: 8
    60
    202 tttaacgcaa cacaatttat cgataaataa atacttttag acgcaacaca atttat
                                                                     116
    205 <210> SEQ ID NO: 9
    206 <211> LENGTH: 116
    207 <212> TYPE: DNA
    208 <213> ORGANISM: Bacillus thuringiensis
    211 <220> FEATURE:
    212 <221> NAME/KEY: N region
    213 <222> LOCATION: (33)..(64)
    214 <223> OTHER INFORMATION: n = a, t, g, or #c
    216 <220> FEATURE:
    217 <221> NAME/KEY: misc feature
    218 <222> LOCATION: (33)..(64)
    219 <223> OTHER INFORMATION: n is a, c, g, or t
    221 <220> FEATURE:
    222 <221> NAME/KEY: N region
    223 <222> LOCATION: (81)..(100)
    224 <223 > OTHER INFORMATION: n = a, t, g, or #c
    226 <220> FEATURE:
    227 <221> NAME/KEY: misc_feature
    228 <222> LOCATION: (81)..(100)
    229 <223> OTHER INFORMATION: n is a, c, g, or t
    231 <400> SEQUENCE: 9
60
    234 nnnnacgcaa cacaatttat nnnnnnnnn nnnnnnnnn acgcaacaca atttat
                                                                     116
    237 <210> SEQ ID NO: 10
    238 <211> LENGTH: 124
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239 <212> TYPE: DNA

RAW SEQUENCE LISTING DATE: 12/29/2004
PATENT APPLICATION: US/09/895,435B TIME: 14:51:43

Input Set : A:\29248-17 seq list.ST25.txt
Output Set: N:\CRF4\12292004\I895435B.raw

240 <213> ORGANISM: Bacillus thuringiensis 243 <220> FEATURE: 244 <221> NAME/KEY: N region 245 <222> LOCATION: (33)..(74) 246 <223> OTHER INFORMATION: n = a, t, g, or #c 248 <220> FEATURE: 249 <221> NAME/KEY: misc\_feature 250 <222> LOCATION: (33)..(74) 251 <223> OTHER INFORMATION: n is a, c, g, or t 253 <400> SEQUENCE: 10 W--> 254 taatacaaca caatattaat tgtgttgtat tannnnnnn nnnnnnnnn nnnnnnnnn 60 256 nnnnnnnnn nnnnacgcaa cacaatttac gataaataaa tacttttaga cgcaacacaa 120 258 ttta 124 RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/29/2004
PATENT APPLICATION: US/09/895,435B TIME: 14:51:44

Input Set : A:\29248-17 seq list.ST25.txt
Output Set: N:\CRF4\12292004\1895435B.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52 Seq#:9; N Pos. 53,54,55,56,57,58,59,60,61,62,63,64,81,82,83,84,85,86,87,88 Seq#:9; N Pos. 89,90,91,92,93,94,95,96,97,98,99,100 Seq#:10; N Pos. 33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52 Seq#:10; N Pos. 53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72 Seq#:10; N Pos. 73,74

#### VERIFICATION SUMMARY

PATENT APPLICATION: US/09/895,435B

DATE: 12/29/2004 TIME: 14:51:44

Input Set : A:\29248-17 seq list.ST25.txt
Output Set: N:\CRF4\12292004\1895435B.raw

L:232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0

M:341 Repeated in SeqNo=9

L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0

M:341 Repeated in SeqNo=10